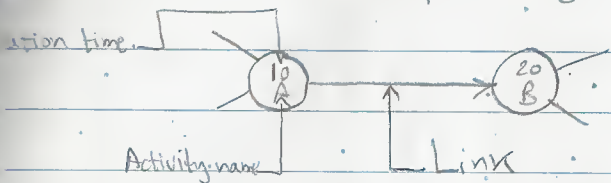


2. Basic precedence diagram

Nodes are instead of arrows



Dummy activity is used at start & end only



Each level of dependency contains activities



$$\text{Link lag} = ES_j - EF_i$$

$$TF_i = LF_i - EF_i = LS_i - ES_i$$

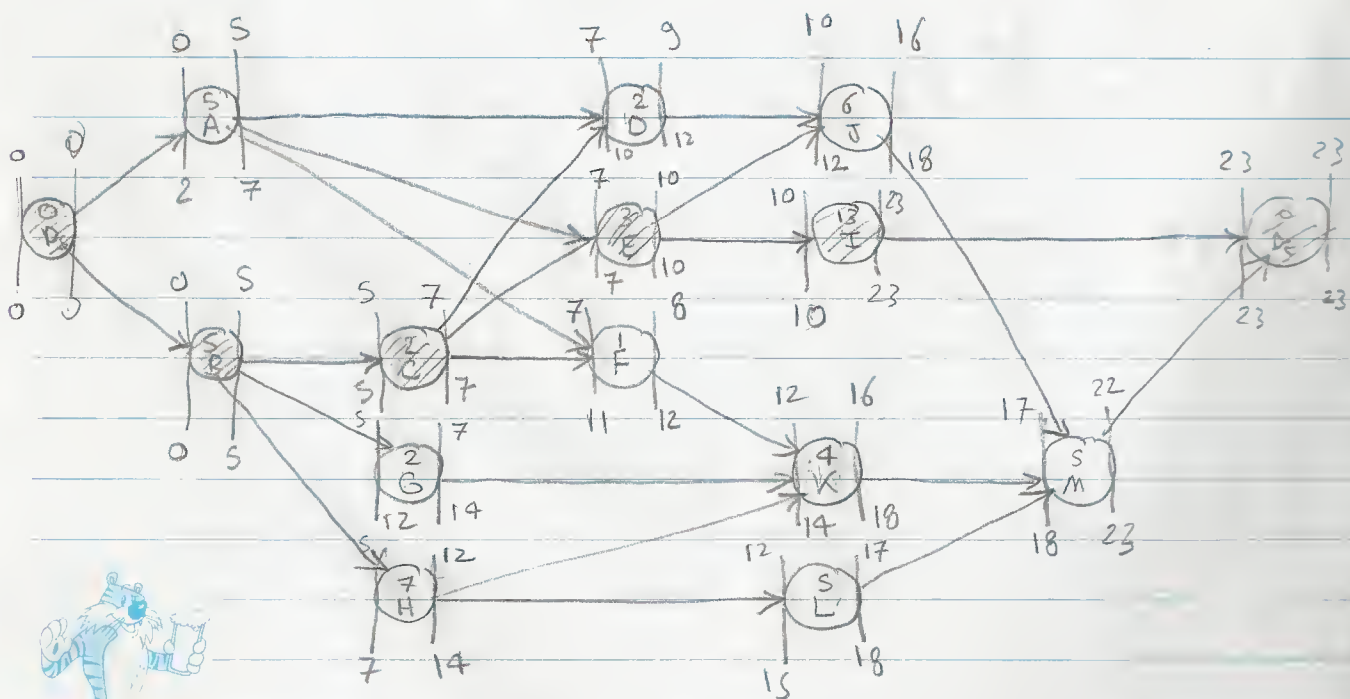
$$FF = \min. (\text{link lag}_{ij})$$

Date :

Page :

* Example

| Activity | Duration(Week) | Predessors |
|----------|----------------|------------|
| A | 5 | — |
| B | 5 | — |
| C | 2 | B |
| D | 2 | A, C |
| E | 3 | A, C |
| F | 1 | A, C |
| G | 2 | B |
| H | 7 | B |
| I | 13 | E |
| J | 6 | E, D |
| K | 4 | F, G, H |
| L | 5 | H |
| M | 5 | J, K, L |



T.C.T = 23 week

EL REDA

Critical path: D_s - B - C - E - I - D_e

| Activity | Duration | ES | LS | EF | LF | FF | TF |
|----------------|----------|----|----|----|----|----|----|
| D _s | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| A | 5 | 0 | 2 | 5 | 7 | 2 | 2 |
| B | 5 | 0 | 0 | 5 | 5 | 0 | 0 |
| C | 2 | 5 | 5 | 7 | 7 | 0 | 0 |
| D | 2 | 7 | 10 | 9 | 12 | 1 | 3 |
| E | 3 | 7 | 7 | 10 | 10 | 0 | 0 |
| F | 1 | 7 | 11 | 8 | 12 | 4 | 4 |
| G | 2 | 5 | 12 | 7 | 14 | 5 | 7 |
| H | 7 | 5 | 7 | 12 | 14 | 0 | 2 |
| I | 13 | 10 | 10 | 23 | 23 | 0 | 0 |
| J | 6 | 10 | 12 | 16 | 18 | 1 | 2 |
| K | 4 | 12 | 14 | 16 | 18 | 1 | 2 |
| L | 5 | 12 | 8 | 17 | 18 | 0 | 1 |
| M | 5 | 17 | 18 | 22 | 23 | 1 | 1 |
| D _e | 0 | 23 | 23 | 23 | 23 | 0 | 0 |

| Link | LAG | Link | LAG |
|-------------------|-----|------------------|-----|
| D _s -A | 0 | D-J | 1 |
| D _s -B | 0 | E-J | 0 |
| A-D | 2 | E-I | 0 |
| A-E | 2 | F-K | 4 |
| A-F | 2 | J-M | 1 |
| B-C | 0 | I-D _e | 0 |
| B-G | 0 | K-M | 1 |
| B-H | 0 | L-M | 0 |
| C-D | 0 | M-D _e | 1 |
| C-E | 0 | | |
| C-F | 0 | | |
| K | 5 | | |
| K | 0 | | |
| L | 0 | | |